

Arboviral Infections

(arthropod-borne encephalitis,
California (La Crosse) encephalitis,
St. Louis encephalitis,
Eastern equine encephalitis,
Western equine encephalitis)

Disease Fact Sheet Series

What are arboviral infections?

Arboviral (short for arthropod-borne) infections are caused by viruses spread to people by arthropods such as mosquitoes and ticks. In Wisconsin, the most common arboviruses are spread by mosquitoes and infections generally occur during warm weather months when mosquitoes are active. Occasionally these infections can cause severe disease such as encephalitis, an inflammation of the brain. California (La Crosse) encephalitis is the most commonly reported arboviral infection in Wisconsin. In spite of the name, La Crosse encephalitis is not confined to the La Crosse county area. (For additional information on West Nile virus, another arbovirus, see the Fact Sheet Series on this virus.)

Who gets arboviral infections?

Anyone can get an arboviral infection. Susceptibility to disease is highest in infancy and old age. Children appear to be most susceptible to La Crosse encephalitis.

How are arboviral infections spread?

Arboviral infections are spread by a bite from a mosquito or tick infected with a specific arbovirus. Fortunately, very few mosquitoes and ticks are infected with arboviruses and capable of spreading the virus to people.

What are the symptoms of arboviral infections?

Symptoms of the commonly occurring arboviral infections in Wisconsin are similar but can differ in severity. Most infections do not result in any symptoms or only mild symptoms of a slight fever and/or headache. Severe infections are marked by a rapid onset of headache, high fever, disorientation, coma, tremors, convulsion and infrequently paralysis or death.

How soon after a bite from an infected mosquito do symptoms occur?

Symptoms usually occur 5 to 15 days after being bitten by an infected mosquito.

(Over)

Does past infection with an arbovirus make a person immune?

Yes, infection with an arbovirus can provide immunity to that specific virus and possibly to other related viruses.

What is the treatment for an infection due to an arbovirus?

A physician will usually attempt to relieve symptoms of the illness, but there is no specific treatment available for arbovirus infections.

How can arboviral infections be prevented?

Preventing mosquito bites will prevent the common arboviral infections in Wisconsin. Personal protective measures such as limiting the time spent outdoors at dawn and dusk or other times mosquitoes are active, wearing long sleeve shirts and long pants when outdoors, using insect repellents when outdoors, and screening your home to prevent mosquito entry can serve to reduce or prevent mosquito bites.

Reducing mosquito populations will also reduce mosquito bites. In some communities, public funded surveillance and control programs reduce mosquito populations by eliminating mosquito breeding habitat, mosquito larvae or adults. You can also take measures in your own yard or on your property to eliminate standing water where mosquitoes breed. Sources of standing water include old tires, metal cans, ceramic pots, clogged rain gutters, wading pools, pool covers, and birdbaths.